

**Remarks**

Reconsideration and allowance of the subject patent application are respectfully requested. Currently, claims 1, 3-10, 12-14, 29, 31-33 and 35-36 are pending in this application.

**Request for Return of Form PTO-1449:**

On August 12, 2003, a Form PTO-1449 was filed in the present application. As of the present date, however, an initialed and dated Form PTO-1449 has not been returned to Applicant. Applicant therefore respectfully requests that the Form PTO-1449 be initialed and dated as an indication that the cited reference has been fully considered and then returned. For the Examiner's convenience, Applicant has attached a fresh copy of the Form PTO-1449.

**Rejections Under 35 U.S.C. §102 and §103:**

Claims 1, 3-10, 12-14, 29, 31-33 and 36 were rejected under 35 U.S.C. §103(a) as allegedly being "obvious" over Cathey et al (U.S. Patent No. 6,255,772, hereinafter "Cathey") in view of Rasmussen (U.S. Patent No. 5,762,773). Applicant respectfully traverses this rejection.

In order to establish a prima facie case of obviousness, all of the claimed limitations must be taught or suggested by the prior art. Applicant submits that the combination of Cathey and Rasmussen fails to disclose each element of the claimed invention. For example, Applicant submits that the combination fails to teach or suggest a black matrix formed of praseodymium-manganese oxide of high resistance so that the black matrix does not drain electrons emitted from the emission source, as required by independent claims 1 and 10 and their respective dependents.

Cathey discloses a black matrix 322 which may be made of “any suitable material.” However, the Office Action admits that “Cathey...fails to exemplify the black matrix being formed of praseodymium-manganese oxide.” (See section 9 of the Office Action). Cathey therefore fails to teach or suggest a black matrix being formed of praseodymium-manganese oxide having a high resistance so that the black matrix does not drain electrons emitted from an emission source.

Rasmussen fails to remedy this deficiency of Cathey. Rasmussen discloses a grille which may be made of a number of various materials. Rasmussen further discloses that praseodymium-manganese oxide is among the various materials that can be used to form the grille. While Rasmussen thus discloses a grille that may be formed of praseodymium-manganese oxide, Rasmussen fails to further disclose that the praseodymium-manganese oxide should be of high resistance so that the black matrix does not drain the electrons from an emission source.

Page 17, lines 11-18 of the present specification states the following:

“As noted above, the praseodymium-manganese oxide material used in the black matrix is selected to be highly resistive, and therefore acts as an insulator. For low voltage operations, it is beneficial to have the areas around the pixels be insulated so that electrons go to the phosphors rather than being drained by non-light emissive materials of the black matrix. Such a drain wastes emitted electrons and increases power consumption, which would be a notable drawback for battery operated devices in particular.”

Again, while Rasmussen discloses using praseodymium-manganese oxide for a grille, there is no further disclosure of the praseodymium-manganese oxide having a high resistance so that the black matrix does not drain electrons from an emission source.

Moreover, Rasmussen also fails to appreciate the benefits of reduced power consumption

resulting from the above claimed feature (see the above cited portion of the present specification). Rasmussen thus fails to teach this explicitly claimed feature nor appreciate the benefits resulting therefrom.

Section 33 of the Office Action argues "Cathey simply does not exemplify praseodymium-manganese oxide as the material for the black matrix, wherein the secondary reference to Rasmussen does." While Applicant does not disagree that Rasmussen discloses a grille being formed by praseodymium-manganese oxide, Applicant submits that Rasmussen fails to further disclose the praseodymium-manganese oxide being of such a high resistance that a black matrix formed by the praseodymium-manganese oxide does not drain electrons from an emission source. Accordingly, even if Cathey and Rasmussen were combined as proposed by the Office Action, the combination would not have taught or suggested all of the claimed limitations.

Accordingly, Applicant submits that claims 1, 3-10, 12-14, 29, 31-33 and 36 are not "obvious" under 35 U.S.C. §103 over Cathey and Rasmussen, and requests that the rejection of these under 35 U.S.C. §103 be withdrawn.

Claims 34-36 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Cathey. While not acquiescing in this rejection nor in the characterization of the references as stated in the Office Action, claim 34 has been canceled, claim 36 has been rewritten in independent form including the limitations of now canceled claim 34, and claim 35 has been amended to depend from claim 36. Applicant traverses the rejection over Cathey as it may apply to amended and still pending claims 35 and 36.

For a reference to anticipate a claim, each element must be found, either expressly or under principles of inherency, in the reference. Applicant submits that Cathey fails to

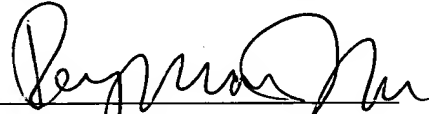
disclose each element of the claimed invention. For example, Applicant submits that Cathey fails to disclose a flat panel field emission display in which an anode switching scheme is used and a black matrix comprises praseodymium-manganese oxide to prevent electrical shorting between different color segments of the display. Applicant thus requests that the rejection of claims 35-36 be withdrawn.

**Conclusion:**

Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

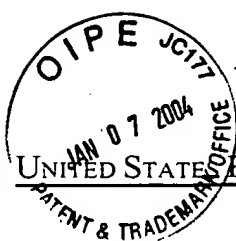
Respectfully submitted,

**Nixon & Vanderhye P.C.**

A handwritten signature in black ink, appearing to read 'Raymond Y. Mah', written over a horizontal line.

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## UNITED STATES PATENT AND TRADEMARK OFFICE

2146-20  
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UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/339,409	01/10/2003	Robert T. Rasmussen	2146-20	4487

23117 7590 10/07/2003  
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ARLINGTON, VA 22201-4714

EXAMINER

RAMSEY, KENNETH J

ART UNIT

PAPER NUMBER

2879

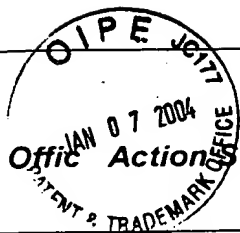
DATE MAILED: 10/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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JAN 12 2004  
TECHNOLOGY CENTER 2800

## DOCKETED

CLT/MATTER # 2146-20  
MAIL DATE OCT. 7 2003  
DUE DATE JAN. 7 2004  
FINAL DEADLINE APR. 7 2004  
DOCKETED BY 3/pal



Applicant(s)

10/339,409

Applicant(s)

RASMUSSEN, ROBERT T.

Examiner

Kenneth J. Ramsey

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 24-27 is/are rejected.
- 7) ☒ Claim(s) 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15, and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohoshi et al 5,534,749 (Ohoshi). See column 1, lines 37-57 and column 3, lines 46-58. Accordingly a field emission device having field emission tips 6, an extraction grid 4 formed of a continuous layer is associated with a novel face plate comprising a phosphor layer 16 and a insulative black matrix 13. Accordingly claims 15 and 15-27 are anticipated.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohoshi in view of Budzilek et al 5,445,899 (Budzilek). Ohoshi et al specifies the black matrix by trade name only, however one of ordinary skill in the art would have been motivated to substitute praseodymium-manganese-oxide for the black matrix of Ohoshi since Budzilek, column 4, lines 14-19, state that  $\text{PrMnO}_3$  is a preferred material for a dielectric black layer. As to claim 22, the use of photoresist to mask areas to be

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left uncovered and removing the photoresist after depositing a coating layer is a well known and obvious method of depositing a patterned layer, such as a black matrix.

As to claim 24, it like wise would have been obvious to one of ordinary skill in the art to deposite a blanket layer of  $\text{PrMnO}_3$  and selectively etch the layer to leave the black matrix pattern since this is also a well known patterning process.

Claims 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohoshi and Budzilek as applied to claim 16 above further in view of Chadha et al.

Claims 17-21 add a process for making the  $\text{PrMnO}_3$  material. It would have been obvious to one of ordinary skill in the art at the time of applicants' invention to employ this process since it is known as taught by Chadha et al, column 4, lines 39-49.

### ***Allowable Subject Matter***

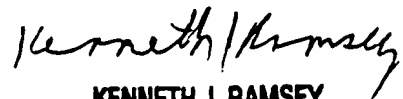
Claim 23 is objected to as depending from a rejected claim but would be allowed if made self contained.

### ***Conclusion***

#### **Directions for Responses**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth J. Ramsey whose telephone number is 308-2324. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (703) 305-4794. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306

  
**KENNETH J. RAMSEY  
PRIMARY EXAMINER**



FORM 1449



# Electronic Information Disclosure Statement

#3




## PACKAGE METHOD AND APPARATUS FOR ORGANIC ELECTRO-LIMINESCENT DISPLAY

Application:   
10/063976  
Confirmation: 4065  
Applicant(s): Mao-Kuo Wei  
Docket Number: 7287-US-PA  
Group Art Unit:  
Examiner:  
search string: ( 5962962 or 5811177 or 5882761 ).pn.

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### US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Citation No.	Patent Number	Date	Bar Code	Patentee	Class	Subclass
AK	P01	5962962	1999-10-05		Idemitsu Kosan Co., Ltd.	313	412
KJR	P02	5811177	1998-09-22		Motorola, Inc.	428	209
AK	P03	5882761	1999-03-16		Pioneer Electronic Corporation, Tohoku Pioneer Electronic Corporation	428	69

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9/27/03

**Notice of References Cited**

**O I P E**

**JAN 07 2004**

**PRIMARY OFFICE**

Application/Control No.

10/339,409

Applicant(s)/Patent Under  
Reexamination  
RASMUSSEN, ROBERT T.

Examiner

Kenneth J. Ramsey

Art Unit

2879

Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5,534,749	07-1996	Ohoshi et al.	313/497
	B	US-5,445,899	08-1995	Budzilek et al.	428/690
	C	US-5,668,437	09-1997	Chadha et al.	313/495
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

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**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.